

## Background

There are different perspectives on the assessment and management of patients with aphasia during the acute care phase of illness, in the acute hospital setting (Fridriksson & Holland, 2001; Johnson, Valachovic, & George, 1998; Peach, 2001). Fridriksson and Holland (2001) emphasize the role of spontaneous recovery and propose an informal assessment approach, coupled with counseling and education. Johnson et al., (1998) endorse an approach that focuses on evaluation, monitoring, and education/counseling that is flexible relative to the needs of the referring physician, patient, and family. Peach (2001) emphasizes the importance of reliable assessment and argues for traditional, standardized assessment. These different perspectives suggest that many variables may be relevant for decision making about assessment and management of aphasia in the acute care setting.

While the acute phase of recovery in patients with aphasia has frequently been conceived of as the first one to three months following the causal event (Holland & Fridricksson, 2001; Marshall, 1997), assessment and management of aphasia in the acute care setting now often begins and ends within a few days of hospital admission. Although the existing literature provides data on impairment-based treatment in the acute stage of recovery, the data have not primarily been derived during care provided in the acute care hospital setting.

The acute care hospital setting can be defined as a hospital setting in which short-term medical or surgical treatment is provided for illness or injury which has frequently occurred within hours of admission. The recent literature reveals that the average length of hospital stay for patients with neurological disease (i.e., stroke) is approximately one

week (with some variability) (DeFrances, Lucas, Bule, & Golosinskiy , 2008; Fridriksson, Frank, & Vesselinov, 2005). Furthermore, most patients (98%) present with more than one medical diagnosis, with seven on average. This suggests that medical care may be complex and more involved then addressing only the recent neurological event. Additionally, short length of stay (LOS) suggests that any care provided in this setting typically will be limited.

In general, the variables which may influence assessment and management within the acute care setting have not been well described. The purpose of this retrospective, descriptive research study was to describe the assessment and care of people with aphasia in the acute care hospital setting and the variables that appear to influence that care.

## **Methods**

After obtaining Institutional Review Board (IRB) approval , the electronic medical records of 207 consented patients referred for aphasia in the acute hospital setting of a major tertiary care institution during a one-year period (2008) were identified and reviewed. (A portion of the data presented here is summarized in an invited but not yet published chapter). These 207 cases represent 29% of a total of 709 patients seen in 2008 by speech-language pathologists (SLPs) in our hospitals (the remaining 71% had nonaphasic cognitive-communication deficits and/or dysphagia, but no aphasia).

### **Patients**

All patients had a diagnosis of aphasia but may also have had other concomitant communication disorders (i.e., dysarthria, apraxia of speech, non-aphasic cognitive-communication disorders).

### **Analyses**

Descriptive statistics were used to describe demographic and relevant medical and management variables. Variables included, but were not limited to: basic demographics (e.g., age, gender), etiology of aphasia, additional communication disorders, complicating medical conditions, length of hospital stay, number of treatment sessions, family involvement, and discharge location (e.g., rehabilitation, home, nursing home).

## **Results**

The mean age of patients with aphasia (PWA) was 67.2 years ( $SD = 17.9$ ). The primary etiology for aphasia was non-hemorrhagic stroke (71%), followed by neurosurgery (usually for neoplasm) (16%), with a variety of etiologies (e.g., seizures, encephalitis, TBI, unoperated brain tumor) contributing to the remaining 13%. Thirty-six patients (17% of the sample) died within an average of 4.3 months following hospital discharge, but within the 2008 year. The average LOS was 8.7 days ( $SD = 10.9$ ), but less than six days for 52% of patients, and less than 3 days for 28% of patients. Average time from admission to initial speech-language evaluation was 3.9 days ( $SD = 6$ ) with 55% evaluated within the first two days after admission. For patients with a LOS greater than 10 days, evaluations often occurred later in their stay for various reasons, including a post-hospital admission causal stroke, medical instability, or the severity of their medical illness.

Management was characterized by a mean of 1.2 ( $SD = 1.3$ ) therapy/management sessions, with family present an average of 1.1 sessions ( $SD = 1.1$ ). On average, there were 1.2 ( $SD = 1.3$ ) unsuccessful attempts to provide care. Failed attempts to provide management occurred for a variety of reasons including nursing care, medical testing,

care by other services, illness, inability to arouse the patient, or because the patient or family declined contact at the time.

Treatment following discharge was recommended for 65% of the patients. No further treatment was recommended for 16% of patients (reasons to be described). Re-evaluation for consideration of therapy was recommended for 19% when the need or appropriateness for further therapy was uncertain (e.g., resolving deficit, severity of medical illness). Thirteen percent were referred for further treatment in an acute hospital rehabilitation setting. Fifty-two percent were referred for therapy in an outpatient or non-acute care setting. Half the patients were discharged home, 20% to an acute rehabilitation facility, 12% to a nursing home, 15% to a skilled nursing facility, and 3% to some other environment.

## **Discussion**

Speech-language services in the acute care hospital are typically provided in an environment characterized by short hospital stays and early post-onset evaluations in patients who are often quite ill. Time for assessment is most often very limited, usually must be done at bedside and in an uncontrolled environment, with patients who are rapidly changing, often dealing with a number of medical concerns, and just beginning to understand their new medical challenges and language difficulties. Our data provide evidence for limited management opportunities in this setting, including interaction with family. On average there were as many failed as successful attempts to provide care following the initial contact.

Based on our data and experience in this setting, we believe that a primary goal of assessment is to identify the primary communication problem (e.g., aphasia vs. non-

aphasic cognitive communication disorder) and its general severity, and to provide education and counseling to the patient, family and other caregivers about the nature of aphasia, strategies to maximize successful communication, and plans for care following acute hospital discharge. While standardized tests might be administered, it is uncommon that comprehensive (i.e., lengthy) assessment and impairment-based treatment are feasible or appropriate in this setting.

Given the limited opportunities to interact with the patient and family (recognizing that there are exceptions), counseling and education should receive primary emphasis during assessment and management in the acute hospital setting. Most patients do need further treatment and/or re-evaluation which will typically be provided in an out-patient non-acute care setting. In general, we agree with the consultative model approach proposed by Johnson, et al. (1998) for speech-language pathologists diagnosing and managing patients with aphasia in the acute care setting. In summary, the results of this study suggest that “traditional structured assessment and management” of aphasia are neither feasible nor appropriate for a majority of people with aphasia in the acute care setting.

## References

- DeFrances, C. J., Lucas, C. A., Bule, V. C., & Golosinskiy, A. (2008). 2006 National Hospital Discharge Survey, *National Health Statistics Reports*, 5, 1-20.
- Fridriksson, J., Frank, E., & Vesselinov, R. (2005). Utilization of speech-language pathology and audiology services in stroke patients. *Journal of Medical Speech-Language Pathology*, 13, 223-231.
- Fridriksson, J. & Holland, A. (2001). Final thoughts on management of aphasia in the early phases of recovery following stroke. *American Journal of Speech-Language Pathology*, 10, 37-39.
- Holland, A. & Fridriksson, J. (2001). Aphasia management during the early phases of recovery following stroke. *American Journal of Speech-Language Pathology*, 10, 19-28.
- Johnson, A. F., Valachovic, A. M., & George, K. P. (1998). Speech-language pathology practice in the acute care setting: A consultative approach. In A. F. Johnson & B. H. Jacobson (Eds.). *Medical speech-language pathology: A practitioner's guide* (pp. 96-130). New York: Thieme.
- Marshall, R. C. (1997). Aphasia treatment in the early postonset period: Managing our resources effectively. *American Journal of Speech-Language Pathology*, 6, 5-11.
- Peach, R. K. (2001). Further thoughts regarding management of acute aphasia following stroke. *American Journal of Speech-Language Pathology*, 10, 29-36.